

ABSTRACT

Disclosed are a detachable keypad and a mobile phone with the detachable keypad. The detachable keypad includes an earphone-microphone jack, a key array, and a DTMF generator. When a key is pressed while an earphone plug is inserted into the earphone-microphone jack, a DTMF signal corresponding to the pressed key is transmitted to a microphone of a mobile phone through an earphone-microphone speaker. In the mobile phone, an earphone-microphone speaker fixing portion fixes an earphone-microphone speaker at a position suitable for a microphone to receive sound from the earphone-microphone speaker. An audio/DTMF separator separates a signal received at the microphone into an audio signal and a DTMF signal. A controller analyzes the DTMF signal and performs an operation according to the analysis result.